AMENDMENTS TO THE CLAIMS

Claims 1-51. (Canceled)

52. (Currently Amended) An assay device comprising:

a laser readable disk;

one or more individual assay sectors including analyte binding signal elements within said disk to be scanned by the incident beam of a laser of a laser disc reader, wherein the signal elements provide an indication of the presence of an analyte by reflection of the incident beam;

a sample inlet port associated with each of said one or more assay sectors to be scanned by the incident beam of, and read by, a laser disk reader;

computer software encoded in said disk which is encoded in an area of said disk which is spatially separate from said assay sectors to allow separate scanning of said software and said sectors; and

said sectors and software being provided in said disk for being read by the same laser disk reader.

53. (Currently Amended) The assay device of claim ~~53~~52 wherein said elements are provided within said sectors within said disk in a predetermined spatially addressable manner.

54. (Currently Amended) The assay device of any one of claims ~~53~~52 and ~~54~~53 wherein said software includes information selected from the group: tracking information for tracking of an incident laser, assay interpretive algorithms, standard control values and self-diagnostics.

55. (Currently Amended) The assay device of claim ~~55~~54 wherein said software is capable of uploading diagnostic information to remote locations.

56. (Withdrawn) The assay device of any one of claims ~~53~~52 and ~~54~~53 wherein said analyte binding elements include cleavable signal elements having a cleavable spacer and a signal responsive moiety.

57. (Withdrawn) The assay device of claim ~~57~~56 wherein said signal responsive moiety is adapted to reflect or scatter incident light.

58. (Withdrawn) The assay device according to claim ~~57~~56, wherein said signal responsive moiety is a metal microsphere.

59. (Withdrawn) The assay device according to claim ~~59~~58, wherein said metal microsphere is essentially a metal selected from the group of gold, silver, nickel, platinum, chromium and copper.

60. (Withdrawn) The assay device according to claim ~~59~~58, wherein said metal is essentially gold.

61. (Withdrawn) The assay device according to claim ~~59~~58, wherein said metal microsphere is ferromagnetic.

62. (Withdrawn) The assay device according to claim ~~57~~56, wherein said cleavable spacer includes a first side member and a second side member, said members including oligonucleotides.

63. (Withdrawn) The assay device according to claim ~~63~~62, wherein said first and second side member oligonucleotides are 5mers - 20mers.

64. (Withdrawn) The assay device according to claim ~~57~~56, wherein said cleavable spacer includes a first side member having a first antibody, and a second side member having a second antibody.

65. (Currently Amended) A laser light detector readable disk comprising:

analyte binding signal elements in a spatially addressable pattern located in an annular area of an outer portion of said disk;

interpretive software encoded in a spiral track located in an annular area of an inner portion of said disk which is spatially distinct from ~~and laterally spaced on said disk from~~ said elements; and

said elements and software are readable by a same disk reader.

66. (Canceled)

67. (Currently Amended) The disk of any one of claims ~~6665~~ and ~~6766~~ wherein the disposition of said signal elements in said pattern is suitable for the assay of multiple samples in parallel.

68. (Currently Amended) The disk of claim ~~6867~~ wherein a substrate of said disk is provided with one or more microfabricated chambers to receive and segregate individual assay sectors of said elements.

69. (Currently Amended) The disk of claim ~~6968~~ wherein a sample inlet port is provided for each of said one or more chambers.

70. (Withdrawn) The disk of claim ~~6665~~ wherein said software includes information for controlling the tracking of an incident laser.

71. (Currently Amended) The disk of claim ~~6665~~ wherein said software includes assay interpretive algorithms.

72. (Withdrawn) The disk of claim ~~6665~~ wherein said software includes information for standard control values.

73. (Currently Amended) The disk of claim ~~6665~~ wherein said signal elements are capable of reflecting or scattering incident laser light.

74. (Currently amended) The disk of claim ~~6665~~ wherein said software is encoded in a semi-reflective layer.

75. (Currently amended) The disk of claim ~~7574~~ wherein said semi-reflective layer is formed from a metal.

76. (Currently amended) The disk of claim ~~6665~~ wherein said disk is provided with an address line to which the deposition of said signal elements is addressable.

77. (Currently amended) The disk of claim ~~7776~~ wherein the disposition of said signal elements is on annular tracks.

78. (Currently amended) The disk of claim ~~7776~~ wherein the disposition of said signal elements is of a spiral configuration.

79. (Currently Amended) A laser light detector readable disk comprising:

~~one or more assay~~ a plurality of assay sectors individually segregated within said disk for individual detector inspection of a sample introduced into a respective sector by laser light;

a sample inlet port associated with each of said ~~one or more~~ assay sectors; ~~and~~

laser light detectable software encoded in said disk in an area spatially distinct in a lateral direction of the disk from said assay sectors;

address information encoded in said disk spatially adjacent to said assay sectors to provide location information as to said assay sectors, and

wherein said assay sectors are positioned about said disk in radially extending spaced relation and said address information is encoded in or on said disk between said assay sectors.

80. (Currently Amended) The disk of claim ~~8079~~ wherein said software is separately readable from said ~~one or more~~ assay sectors.

81. (Currently Amended) The disk of claim ~~8079~~ wherein analyte binding elements are provided within at least one of said ~~one or more of~~ said assay sectors.

82. (Withdrawn) The disk of claim ~~8281~~ wherein said analyte binding elements include cleavable signal elements having a cleavable spacer and a signal responsive moiety.

83. (Withdrawn) The disk of claim ~~8382~~ wherein said signal responsive moiety is adapted to reflect or scatter incident light.

84. (Withdrawn) The disk of claim ~~8281~~ wherein said cleavable spacer includes a first side member and a second side member, said members including oligonucleotides.

85. (Currently Amended) The disk of claim ~~81~~80 wherein said analyte binding elements include oligonucleotides to bind an analyte within said sector for inspection by a laser light detector.

86. (Canceled)

87. (Canceled)

88. (Withdrawn) A method for conducting an inspection of an analyte preselected for detection through the use of a laser disk and laser disk reader having an incident laser which scans the disk under the control of an associated computer, comprising:

providing one or more analyte binding elements in a predetermined first location on or within a substrate of a laser readable disk,

introducing a sample, suspected of including an analyte which will bind to said one or more elements, to said predetermined first location,

reading software information, including incident laser tracking control information, encoded on or in said disk in a second location which is spaced separate and laterally relative said disc from said first location; and

scanning said incident laser under the control of a computer over said predetermined location to determine a presence or absence of an analyte at said location using said tracking control information.

89. (Withdrawn) The method of claim 88 ~~89~~ wherein a plurality of analyte binding elements are provided in a spatially addressable pattern.

90. (Withdrawn) The method of claim 89 ~~90~~ wherein address information is encoded in said disc which is used in the scanning of said incident laser to address a location to be scanned.

SUMMARY OF INTERVIEW

A personal interview was held on October 16, 2003 between Examiner Ardin Marschel and Applicant's prior representative, Guy Porter Smith. The results were as follows:

Identification of Claims Discussed

Pending claims of the application were generally discussed.

Results of Interview

During the interview, Examiner Ardin Marschel clarified the status of the Office Action mailed July 17, 2003 as "Non-Final." The PTO-326 form mailed regarding said Office Action confusingly included a Non-Final as well as a Final Action status indication. It was established that the Non-Final Office Action indication correctly characterizes the status of this application.